

**STATE FOREST LAND  
ENVIRONMENTAL CHECKLIST**

**Purpose of Checklist:**

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

**Instructions for Applicants:**

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forestland proposals. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at <http://www.dnr.wa.gov> under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forestland activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

**Use of checklist for nonproject proposals:**

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

**A. BACKGROUND**

1. Name of proposed project, if applicable:

*Timber Sale Name:* **SNAP RIDGE**

*Agreement #:* **30-076125**

2. Name of applicant: **Department of Natural Resources**

3. Address and phone number of applicant and contact person: **713 Bowers Rd, Ellensburg, WA 98926 John Haddon (509) 925-8510**

4. Date checklist prepared: **09/29/2004**

5. Agency requesting checklist: **Department of Natural Resources**

6. Proposed timing or schedule (including phasing, if applicable):

a. *Auction Date:* **Spring 2005**

b. *Planned contract end date (but may be extended):* **Fall 2006**

c. *Phasing:* **None**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

*Timber Sale*

a. *Site preparation:* **Mechanical scarification of woody herbaceous vegetation in conjunction with logging.**

b. *Regeneration Method:* **Hand plant Douglas-fir seedlings per acre in spring 2007.**

c. *Vegetation Management:* **If needed herbicide spot treatment by ground application will follow Department procedures and guidelines. Needs will be assessed at completion of planting.**

d. *Thinning:* **No**

*Roads:* **Use existing roads predominantly. 640' new construction within Unit #3.**

*Rock Pits and/or Sale:* **N/A**

*Other:*

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
- ☐ 303 (d) – listed water body in WAU: ☐temp ☐sediment ☐completed TMDL (total maximum daily load):
- ☐Landscape plan:
- ☐Watershed analysis:
- ☐Interdisciplinary team (ID Team) report:
- ☒Road design plan: **Road plan dated 9/22/04.**
- ☒Wildlife report: **SE regional biologist report**
- ☐Geotechnical report:
- ☒Other specialist report(s): **DNR Cultural Resource Survey, June 2004**
- ☒Memorandum of understanding (sportsmen’s groups, neighborhood associations, tribes, etc.): **Buck Creek Watershed Comprehensive Management Plan 2000**
- ☐Rock pit plan:
- ☒Other: **Forest Resource Plan: EIS adopted July 31, 1992 & DNR’s Habitat Conservation Plan (HCP) dated January 30, 1997, and amended for the Klickitat Planning Unit April, 2004.**
9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. **No.**
10. List any government approvals or permits that will be needed for your proposal, if known.
- ☐HPA ☒Burning permit ☐Shoreline permit ☒Incidental take permit ☒FPA # **2703099** ☐Other:
11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)
- a. *Complete proposal description:* **200 acres were considered for harvest and the three units (85 acres) were selected for regeneration harvest out of the greater Husum sub-landscape due to their declining health, isolated fragmented condition, and lack of complex or sustainable habitat condition. This proposal is a regeneration harvest of three separate units totaling 85 acres. The units will be ground-based harvested with shovel and/or skidders. Woody herbaceous vegetation (vine maple, California hazel, etc.), will be pulled up and piled, and the piles burned during the fall burning period. The site will be replanted with Douglas-fir seedlings.**
- The proposal is in the Buck Creek block of trust-managed forestland that includes the City of White Salmon’s municipal watershed. This block of state trust land is managed as the Husum Sub-Landscape under the DNR’s HCP. It is NRF designated land in support of northern spotted owls. The target threshold for maintaining habitat in this sub-landscape is for 1/3 of the approximately 26,000 acres to be in NRF condition. On the ground habitat assessment of the sub-landscape in 2004 revealed approximately 10,000 acres currently in NRF habitat on forestland capable of growing NRF habitat. During this inventory, the sustainability of each stand was also assessed, and initial harvest decisions were based on the continued viability of habitat conditions being maintained or declining in each stand.**
- b. *Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.*  
**The three units in this timber sale are all in Douglas-fir dominated stands of approximately 110-140 years of age. The stands were fire-initiated and contain some older Douglas-fir remnants.**
- Unit #1 is 60 acres on a west-facing ridge above the south fork of Buck Creek. It was previously entered for the removal of poles. That harvest left 55 trees per acre spaced out that met the Dispersal designation at that time, but that does not meet the newly designated NRF description. The more open stand condition has allowed vine maple and other brush species to flourish, and the advance reproduction is predominantly grand fir. The objective of a regeneration harvest in this stand is to re-establish a Douglas-fir stand and manage the stocking level to attain NRF characteristics at stand maturity. Large remnant Douglas-fir trees are retained for cavity snag recruitment. Additionally large dominant crowned Douglas-firs are scattered across the unit to provide some shade and natural seeding on this west facing rocky slope.**
- Unit #2 is a 10 acre stand that currently meets NRF characteristics, but is declining due to the senescence and mortality in the grand fir component of the stand. Similarly to Unit #1, the understory is grand fir dominated regeneration and thick vine maple. The objective is to re-establish a healthy Douglas-fir stand and manage it towards NRF habitat. The surrounding timber sale unit was replanted with a mix of Douglas-fir and ponderosa pine to combat some root rot in the previous stand. This stand is not expected to grow into NRF habitat due to the pine component.**
- Unit #3 is a 15 acre stand on the other side of the Middle Fork Buck Creek from Unit #2. It was also part of the pole sale with Unit #1, but still meets NRF characteristics due to the better and more protected site. As on the other two units, at least 12 large Douglas-fir trees are scattered across the unit to provide large structure in the subsequent NRF managed stand.**
- c. *Road activity summary. See also forest practice application (FPA) for maps and more details.*  
**Roads are mostly existing, rocked, high standard forest roads within the watershed. 640’ of new construction for a spur into Unit #3.**

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		640’	.2	0
Reconstruction		0		
Abandonment		0		
Bridge Install/Replace	0			
Culvert Install/Replace (fish)	0			
Culvert Install/Replace (no fish)	0			

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit

applications related to this checklist. (See timber sale map. See also color landscape/WAU map on the DNR website <http://www.dnr.wa.gov> under “SEPA Center.”)

- a. Legal description: **Parts of Section 5, 6 and 18, Townshp 4 North Range 10 East, W.M., in Klickitat County.**
- b. Distance and direction from nearest town (include road names): **This proposal is approximately 12 miles northwest of White Salmon, WA off of the Northwestern Lake county road. All units are accessed off of the B-1000 road system. Unit #1 is accessed off of the B-1910 road. Unit #2 is accessed from the B-1800 road. Unit #3 is off the B-1560 road. See vicinity map.**
- c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website <http://www.dnr.wa.gov> under “ SEPA Center.”)

WAU Name	WAU Acres	Proposal Acres
<b>BUCK CREEK</b>	<b>28991</b>	<b>85</b>

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website <http://www.dnr.wa.gov> under “SEPA Center” for a broader landscape perspective.)

The DNR manages 17,330 acres or 60% of the forestland within the Buck Creek WAU. As described above in A.11.a., this land is managed on a landscape level as part of the 26,000 acre Husum Sub-Landscape, containing forestland in the Cave Creek and Dog Mountain WAU’s. A target threshold of 1/3 of the entire sub-landscape is to be maintained in NRF habitat condition, and additionally 1/3 of the acres are to be in a near-NRF condition (actively managed to promote into NRF habitat within 10-30 years). This overall goal will have the effect of outlining a landscape level harvest plan for this block of forestland that focuses on maintaining and promoting high quality, sustainable NRF habitat through active management.

Current and on-going habitat assessment, together with accurate and current owl demographic surveying, will target the harvesting of poor quality or unsustainable habitat initially. Sustainable older mature forest stands, and areas adjacent to known owl nest sites, will be maintained as per Amendment #1 to the Klickitat Planning Unit of the HCP. Young stands, and overstocked stands will be thinned to accelerate the development of NRF habitat conditions throughout the entire managed sub-landscape.

The emphasis on NRF habitat will have the corollary effect of providing more acres of higher quality mature forest cover for other wildlife species, as well as other forest functions (hydrologic functions, recreation, visuals...). Additionally the retention of 10-12 large diameter Douglas-fir trees, generally scattered across all harvested acres, will provide a shelterwood type of cover and large live and dead structure through the next timber stand rotation.

In the Buck Creek WAU, in the past seven years, as of 9/7/04 according to DNR GIS FPA statistics, the DNR has evenage-harvested 308 acres, and thinned 1154 acres. Non-DNR forestland owners have evenage-harvested 637 acres, and thinned approximately 819 acres. The level of harvesting has not been high, however negative impacts could occur from localized cumulative harvests over a short time period. The shift to a sub-landscape level of harvest planning and the increased flexibility will allow harvest planning across all 26,000 acres, and mitigate possible negative effects from concentrated harvesting on smaller areas.

Prior to the April 2004 Amendment to the HCP for the Klickitat Planning Unit, the forestland managed by the DNR in the Buck Creek WAU was designated as Dispersal and managed on a ¼ township basis.

**B. ENVIRONMENTAL ELEMENTS**

**1. Earth**

- a. General description of the site (check one):

☐Flat, ☐Rolling, ☐Hilly, ☐Steep Slopes, ☒Mountainous, ☐Other:

- 1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone). **The Buck Creek WAU is a steep watershed cut by deeply incised stream channels. The elevation is from 4279’ down to 290’ at the White Salmon River. The mean elevation is 1914’. The climate is an Eastern Cascade type with a pronounced warm summer drought yet a westside precipitation level of 50-60 inches/year. Grand fir and western hemlock plant associations dominate, with Douglas-fir being the most common timber species.**
- 2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s). **This proposal is towards the upper end of the WAU with Unit #1 at 3200’ and Unit’s #2 and #3 at 3400’.**

- b. What is the steepest slope on the site (approximate percent slope)? **Units #2 and #3 are relatively flat (<20%). Unit #1 is a consistent slope of approximately 30-35% for the majority of the unit. Approximately 5 acres in the SW portion is at 40%.**
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. *Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.*

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
<b>8089</b>	<b>GRAVELLY LOAM</b>	<b>30-65</b>	<b>55</b>	<b>LOW</b>	<b>MEDIUM</b>
<b>8088</b>	<b>GRAVELLY LOAM</b>	<b>5-30</b>	<b>25</b>	<b>INSIGNIFIC'T</b>	<b>MEDIUM</b>
<b>3904</b>	<b>COBBLY LOAM</b>	<b>30-65</b>	<b>5</b>	<b>LOW</b>	<b>HIGH</b>

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

- 1) Surface indications: **None.**

2) Is there evidence of natural slope failures in the sub-basin(s)?  
☒No   ☐Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:

3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?  
☐No   ☒Yes, type of failures (shallow vs. deep-seated) and failure site characteristics: **A shallow slope failure is on a side draw to Wilson Creek in the SE¼ of Section 24, approximately 1½ miles from Unit #1. It is in a bowl-shaped feature that concentrated water and the failure occurred at the slope break. It is within the soil type XERORTHENTS (#9435) which has high mass wasting potential and is highly erosive. Associated management activity: This is associated with a clearcut harvest. The failure occurred in a timbered portion above the clearcut. The road at the top of the slope may have concentrated runoff.**

4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?  
☒No   ☐Yes, describe similarities between the conditions and activities on these sites: **The proposal area is unlike the failure site described above. Unit #1 is a rocky even slope of stable gravelly loam soils, and Unit’s #2 and #3 are relatively flat.**

5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal. **The slope south of Unit #1 steepens, and faces more to the SW. This slope was left out of the sale. Existing skid trails from the pole sale appear stable and well located, and will be used again for this harvest. Areas of typical slope instability in this WAU, such as inner gorges, are absent from this proposal as they are protected in the Riparian Management Zones (RMZ) at the bottom of all three units.**

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.  
Approx. acreage new roads: **.2**   Approx. acreage new landings: **.5**   Fill source: **N/A**
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. **No. The road construction is on a cleared and previously used skid trail and is flat.**
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Approximate percent of proposal in permanent road running surface (includes gravel roads): **None.**
- h. Propose measures to reduce or control erosion, or other impacts to the earth, if any:(Include protection measures for minimizing compaction or rutting.) **Seasonal logging and haul restriction and the use of existing skidtrails within the units will minimize erosion. A wider than required RMZ protects the steeper slopes near the Type 4 creeks at the bottom of all three units.**

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.  
**Some dust will occur during hauling operations. Brush and slash pile burning will produce smoke, DNR smoke management rules will apply.**
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. **No.**
- c. Proposed measures to reduce or control emissions or other impacts to air, if any: **Follow burn permit guidelines, and contact DOE regarding proper burn periods.**

3. Water

- a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. (See timber sale map and forest practice base maps.)

a) Downstream water bodies: **The South Fork Buck Creek (Type 4) is just below Unit #1. The Middle Fork Buck Creek (Type 4) is just below Unit #2 and #3. Buck Creek is a tributary to the White Salmon River.**

b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
<b>S. Fork Buck Creek</b>	<b>4</b>	<b>1</b>	<b>100’</b>
<b>M. Fork Buck Creek</b>	<b>4</b>	<b>1</b>	<b>100’</b>

c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers. **Both Type 4 creeks listed above are protected with Type 3 RMZ buffers to provide additional shade and structural protection to these high quality riparian stretches. Also both creeks flow into the main stem of Buck Creek (Type 3) approximately three miles below this proposal. These buffers contain western redcedar, western hemlock, black cottonwood, and various wetland facultative plants such as lady ferns and skunk cabbage.**
- 2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.  
☐No   ☒Yes (See RMZ/WMZ table above and timber sale map.)  
Description (include culverts):

**Timber will be cut up to the RMZ boundary (within 200' of the described waters) but not inside of the 100' buffer.**

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.  
**None.**
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (*Include diversions for fish-passage culvert installation.*)  
☒No ☐Yes, description:
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.  
☒No ☐Yes, describe location:
- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.  
☒No ☐Yes, type and volume:
- 7) *Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?*  
**Steep slopes with erodible soils and inner gorges are susceptible to soil movement within this sub-basin. There is potential delivery to surface waters if disturbed soils are in close proximity to typed waters.**
- 8) *Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?*  
☒No ☐Yes, describe changes and possible causes:
- 9) *Could this proposal affect water quality based on the answers to the questions 1-8 above?*  
☒No ☐Yes, explain: **The inner gorges are bounded out of this proposal and the harvest is well away from the stream channels. The small portion of steep (35-40%) ground in Unit #1 is an extremely rocky soil type, and this area is above the B-1900 road in this unit, more than 600' from the creek below.**
- 10) *What are the approximate road miles per square mile in the WAU and sub-basin(s)? 4.2 miles/sq. mile  
Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?*  
☒No ☐Yes, describe:
- 11) *Is the proposal within a significant rain-on-snow (ROS) zone? If not, **STOP HERE** and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.*  
☐No ☒Yes, approximate percent of WAU in significant ROS zone.  
Approximate percent of sub-basin(s):  
**39% of the WAU is in the peak ROS zone. Unit #1 (60 acres) is at the upper end of the ROS zone in this WAU. Units #2 and #3 (25 acres together) are above the ROS zone in the snow-dominated zone.**
- 12) *If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?*  
**From 1988 Landsat data, 64% of the WAU is hydrologically mature.**
- 13) *Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?*  
☒No ☐Yes, describe observations:
- 14) *Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.*  
**The harvest of Unit #1 represents a 0.5% reduction in hydrologically mature forest cover within the Buck Creek WAU ROS zone. The unit is at 3200', or the upper end of the ROS zone, and the aspect is W-SW. The potential for large accumulations of snow on this slope is low, and therefore the risk of ROS events resulting in large peak flow impacts is also low.**
- 15) *Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?*  
☐No ☒Yes, possible impacts:  
**The City of White Salmon has reserve surface water rights and a municipal water intake on Buck Creek, approximately 4 miles below the proposal. The City currently draws municipal water from two wells just outside the Buck Creek WAU to the east of the White Salmon River. The entire Buck Creek WAU is within a critical recharge area to support those wells as documented in a hydrologic analysis report within the Comprehensive Watershed Management Plan between the City and DNR. For this specific proposal mechanical vegetation control will be used to reduce the need for aerial herbicide application and will be done concurrently with logging to reduce soil compaction and related soil erosion to the adjacent streams. The Department still anticipates the use of ground based spot herbicide treatment to control vine maple.**  
  
**The DNR's management practices with regards to timber harvesting and road development and maintenance protect soil and surface water resources from degradation. Limiting wet weather compaction, draining roads to the forest floor and not to typed stream channels, RMZ buffers, locating landings away from typed waters, and the rocking of roads within the watershed, are examples of management practices that protect water resources for fish as well as promoting the infiltration of precipitation for the critical recharge area. The operator is required to have sanitary facilities on site.**
- 16) *Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.*  
**Unit #1 is within the ROS zone. The roads within this unit are existing rocked roads, built and maintained to a high standard. Currently there are adequate culvert cross drains that are well located away from typed waters to disperse any road runoff to the forest floor. Skidtrails within this unit will be waterbarred with large waterbars and logging slash distributed across them after harvest.**

b. Ground Water:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.  
**No.**
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.  
**None.**
- 3) *Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?*  
☐No ☒Yes, describe:  
**See 3.a.15 above regarding surface water protection. This proposal is unlikely to impact groundwater capture or infiltration and the hydrologic recharge functioning of the area will remain unchanged.**
  - a) *Note protection measures, if any.*  
**As above in 3.a.16.**

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.  
**Road-related collection and runoff will be diverted to the forest floor and will not directly enter surface waters.**
- 2) Could waste materials enter ground or surface waters? If so, generally describe.  
**The proposal will not produce waste materials as a normal part of the operation.**  
*Note protection measures, if any.*  
**Landings will be located well away from typed waters in order to reduce the leaching of complex naturally occurring chemicals from the breakdown of bark and slash. In the event of equipment failure or accident, contaminated soil will be removed and disposed of properly. As part of the agreement with the City of White Salmon, the operator will be required to have a portable toilet on site.**

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:  
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

4. Plants

a. Check or circle types of vegetation found on the site:

- ☐deciduous tree: ☐alder, ☐maple, ☐aspen, ☐cottonwood, ☐western larch, ☐birch, ☐other:  
☒evergreen tree: ☒Douglas fir, ☒grand fir, ☐Pacific silver fir, ☐ponderosa pine, ☐lodgepole pine,  
☒western hemlock, ☐mountain hemlock, ☐Englemann spruce, ☐Sitka spruce,  
☒red cedar, ☐yellow cedar, ☐other:  
☒shrubs: ☒huckleberry, ☐salmonberry, ☐salal, ☒other: vine maple, California hazel, oceanspray  
☐grass  
☐pasture  
☐crop or grain  
☐wet soil plants: ☐cattail, ☐buttercup, ☐bullrush, ☐skunk cabbage, ☐devil's club, ☐other:  
☐water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:  
☐other types of vegetation:  
☐plant communities of concern:

- b. What kind and amount of vegetation will be removed or altered? (See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)

**Approximately 3130 Mbf of timber will be removed from all three units together. Additionally the woody herbaceous vegetation (mostly vine maple) will be pulled and piled to facilitate handplanting.**

- 1) *Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: <http://www.dnr.wa.gov> under "SEPA Center.")*  
**Unit #1: to the west and south are similar timber stands of 100-130 years. To the north is a 25 year old Douglas-fir plantation, and to the east is a 15 year old plantation.**  
**Units #2 and #3: these units are surrounded by a six year old plantation of mixed Douglas-fir and ponderosa pine. North of Unit 3 is a 15 year old plantation. Between these two units is a timber stand including many large Douglas-fir remnants and snags along the Middle Fork Buck Creek.**
- 2) *Retention tree plan:*  
**A minimum of 12 large Douglas-fir leave trees are scattered across all acres.**

- c. List threatened or endangered *plant* species known to be on or near the site. **None.**

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:  
**None.**

5. Animal

- a. Circle or check any birds animals or unique habitats which have been observed on or near the site or are known to be on or near the site:

birds: ☐hawk, ☐heron, ☐eagle, ☒songbirds, ☐pigeon, ☒other: winter wrens

mammals: ☒deer, ☒bear, ☒elk, ☐beaver, ☐other:  
fish: ☐bass, ☐salmon, ☐trout, ☐herring, ☐shellfish, ☐other:  
unique habitats: ☐talus slopes, ☐caves, ☐cliffs, ☐oak woodlands, ☐balds, ☐mineral springs

b. List any threatened or endangered species known to be on or near the site (include federal- and state-listed species).  
**None.**

c. Is the site part of a migration route? If so, explain.  
☒Pacific flyway ☐Other migration route: Explain if any boxes checked:  
**The site is below the Pacific flyway, but is not used by migratory waterfowl.**

d. Proposed measures to preserve or enhance wildlife, if any:

1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.

Species /Habitat: <b>Snag dependent species</b>	Protection Measures: <b>Protect significant snags and retain all other snags where operationally feasible.</b>
Species /Habitat: <b>Large nest cavity trees</b>	Protection Measures: <b>Retain scattered across all acres.</b>
Species /Habitat: <b>Spotted owls</b>	Protection Measures: <b>See A 11a</b>

6. **Energy and Natural Resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project’s energy needs? Describe whether it will be used for heating, manufacturing, etc. **None.**

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. **No.**

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: **None.**

7. **Environmental Health**

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. **Oil/diesel and hydraulic fluid spills are possible. No fuel storage will be allowed on site, and precautions against routine spills will be taken.**

1) Describe special emergency services that might be required. **The area is covered by forest patrol assessment for DNR fire suppression needs.**

2) Proposed measures to reduce or control environmental health hazards, if any: **The burning of slash/brush piles wil be according to DNR smoke management rules and in accordance with DOE air quality control.**

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? **None.**

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site. **Heavy equipment noise will occur from very early in the morning through daylight hours.**

3) Proposed measures to reduce or control noise impacts, if any: **None.**

8. **Land and Shoreline Use**

a. What is the current use of the site and adjacent properties? (Site includes the complete proposal, e.g. rock pits and access roads.) **Timber production**

b. Has the site been used for agriculture? If so, describe. **No.**

c. Describe any structures on the site. **None.**

d. Will any structures be demolished? If so, what? **No.**

e. What is the current zoning classification of the site? **Forest Resource.**

f. What is the current comprehensive plan designation of the site? **Agriculture/Forestry.**

g. If applicable, what is the current shoreline master program designation of the site? **N/A**

h. Has any part of the site been classified as an “environmentally sensitive” area? If so, specify. **No.**

i. Approximately how many people would reside or work in the completed project? **N/A**

j. Approximately how many people would the completed project displace? **None.**

k. Proposed measures to avoid or reduce displacement impacts, if any: **None.**

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: **Forest management will continue.**



9.       **Housing**
- a.       Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. **None.**
  - b.       Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. **None.**
  - c.       Proposed measures to reduce or control housing impacts, if any: **N/A**
10.       **Aesthetics**
- a.       What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed? **N/A**
  - b.       What views in the immediate vicinity would be altered or obstructed?
    - 1)       *Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?*  
☒ **No**    ☐ **Yes, viewing location:**
    - 2)       *Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?*  
☒ **No**    ☐ **Yes, scenic corridor name:**
    - 3)       *How will this proposal affect any views described in 1) or 2) above?* **N/A**
  - b.       Proposed measures to reduce or control aesthetic impacts, if any: **None.**
11.       **Light and Glare**
- a.       What type of light or glare will the proposal produce? What time of day would it mainly occur? **None.**
  - b.       Could light or glare from the finished project be a safety hazard or interfere with views? **N/A**
  - c.       What existing off-site sources of light or glare may affect your proposal? **None.**
  - d.       Proposed measures to reduce or control light and glare impacts, if any: **None.**
12.       **Recreation**
- a.       What designated and informal recreational opportunities are in the immediate vicinity?  
**Hunting, hiking, mountain biking, horseback riding, Buck Creek Trail.**
  - b.       Would the proposed project displace any existing recreational uses? If so, describe: **Yes, temporary closure of the portion of the Trail within and adjacent to the proposal.**
  - c.       Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: **Post harvest the logging contractor will clear the logging slash off of the Trail.**
13.       **Historic and Cultural Preservation**
- a.       Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe. **No.**
  - b.       Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site. **None. A survey of the site has been conducted by the DNR's archaeologist.**
  - c.       Proposed measures to reduce or control impacts, if any:  
*(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)* **Should any cultural resources be identified within the sale boundaries during timber harvest, work will cease in that area, a professional archaeologist will be notified immediately, and a site protection plan will be developed.**
14.       **Transportation**
- a.       Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any. **Northwestern Lake county road serves the site directly from existing forest roads.**
    - 1)       *Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?* **No.**
  - b.       Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop? **No.**
  - c.       How many parking spaces would the completed project have? How many would the project eliminate? **None.**
  - d.       Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private). **No.**
    - 1)       *How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?*  
**N/A**
  - e.       Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. **No.**



- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur. **10-20 log trucks trips per day.**
- g. Proposed measures to reduce or control transportation impacts, if any: **None.**

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe. **No. The operator will be required to have fire suppression equipment on site during operations.**
- b. Proposed measures to reduce or control direct impacts on public services, if any. **None.**

16. Utilities

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other. **None.**
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. **None.**

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by:	<div>ALBERT DURKEE, District Forester</div>	Date:	<div></div>
Reviewed by:	<div>PETER T. STOCKS, District Manager</div>	Date:	<div></div>
	<div>JOHN HADDON, Management Forester</div>	Date:	<div></div>
Approved by:	<div>GEORGE B. SHELTON, Assistant Region Manager</div>	Date:	<div></div>